

REMARKS

The final Office Action dated November 13, 2007 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-21 are now pending in this application. Claims 1-21 stand rejected.

The rejection of Claims 1-21 under 35 U.S.C. § 103(a) as being unpatentable over Applicants' Admitted Prior Art (hereinafter referred to as "AAPA" in view of U.S. Patent 6,636,749 to Holmes, et al. (hereinafter referred to as "Holmes")) is respectfully traversed.

AAPA describes a programmable logic controller (PLC) wireless communication system (10) including a backplane (12) and a central processing unit (CPU) card (14) mounted thereon. A CPU is mounted on the CPU card (14). Backplane (12) includes a plurality of module connectors (16) which accept modules such as a wireless communication module (18). Module connectors (16) communicate with the CPU via a PLC module bus. During normal operation, the CPU sends information to be wirelessly communicated across the PLC module bus to wireless communication module (18). Additionally, information that is received by wireless communication module (18) is sent by wireless communication module (18) across the PLC module bus to the CPU.

Holmes describes a connection device (128) that provides a connection between a vehicle (102) and a wireless phone (110). Specifically, the connection device (128) provides both a power connection and an audio connection between the vehicle (102) and the wireless phone (110). The connection device (128) includes a vehicle adapter (104), a Bluetooth module (106), a main cord (108), an audio cord (122), and audio interface (120), a splitter (121), a power cord (124), and a phone power connector (118). The vehicle adapter (104), such as a cigarette lighter adapter, provides a connection between the connection device (128) and the vehicle (102) and includes the Bluetooth module (106). The Bluetooth module (106) includes circuitry, such as a processor, that facilitates the exchange of communication signals between the wireless phone (110) and a Bluetooth device (126) that is located within the vehicle.

Applicants respectfully traverse the Examiner's assertion that Holmes describes a Bluetooth module that includes "a transceiver in order to facilitate the exchange of communication signals wirelessly between the module and the wireless phone...." As explained above, Holmes clearly does not describe the exchange of communication signals wirelessly between the Bluetooth module and the wireless phone. Rather, Holmes describes a connection device that adds wireless protocol capability to a charge cord, thereby allowing a wireless phone to acquire wireless protocol. The connection device includes a Bluetooth module and is coupled to the wireless phone by a cable. The Bluetooth module communicates wireless signals to a separate Bluetooth device located within the vehicle, not to the wireless phone. An example of a Bluetooth device with which the Bluetooth module communicates is a hands-free car kit. Moreover, Holmes describes the connection device as having an advantage over other systems that require a user to purchase a wireless protocol attachment, such as a Bluetooth attachment, that would attach to the wireless phone in addition to the charge cord.

Claim 1 recites a method for manufacturing that includes "providing a central processing unit (CPU) configured for a programmable logic controller (PLC) including a PLC module bus for coupling at least one PLC module to the CPU; providing a means for wireless radio frequency communications between the PLC and a plurality of remote devices; and operationally coupling the means for wireless radio frequency communications to the CPU, wherein the CPU is mounted on a backplane of a rack, wherein the means and the CPU communicate without using the PLC module bus."

Neither AAPA nor Holmes, considered alone or in combination, describes or suggests a method for manufacturing, as recited in Claim 1. More specifically, neither AAPA nor Holmes, considered alone or in combination, describes or suggests providing a means for wireless radio frequency communications between the PLC and a plurality of remote devices. Moreover, neither AAPA nor Holmes, considered alone or in combination, describes or suggests operationally coupling the means for wireless radio frequency communications to the CPU, wherein the CPU is mounted on a backplane of a rack, wherein the means and the CPU communicate without using the PLC module bus. Rather, AAPA describes a CPU and

a wireless communication module that communicate across a PLC module bus, and Holmes describes a connection device including a Bluetooth module that is coupled to the wireless phone by a cable, wherein the Bluetooth module communicates wireless signals to a single separate Bluetooth device located within the vehicle, not to the wireless phone.

Accordingly, for at least the reasons set forth above, Claim 1 is submitted to be patentable over AAPA in view of Holmes.

Claims 2-6 depend from independent Claim 1. When the recitations of Claims 2-6 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-6 likewise are patentable over AAPA in view of Holmes.

Claim 7 recites a method for communicating that includes “providing a plurality of wireless communication devices; sending wireless messages from the plurality of wireless communication devices to a programmable logic controller (PLC) having a central processing unit (CPU) and a PLC module bus for coupling at least one PLC module to the CPU; and operationally coupling a means for wireless radio frequency communications to the CPU, wherein the CPU is mounted on a backplane of a rack, wherein the means for wireless radio frequency communications and the CPU communicate without using the PLC module bus.”

Neither AAPA nor Holmes, considered alone or in combination, describes or suggests a method for communicating, as recited in Claim 7. More specifically, neither AAPA nor Holmes, considered alone or in combination, describes or suggests sending wireless messages from the plurality of wireless communication devices to a programmable logic controller (PLC) having a central processing unit (CPU) and a PLC module bus for coupling at least one PLC module to the CPU. Moreover, neither AAPA nor Holmes, considered alone or in combination, describes or suggests operationally coupling a means for wireless radio frequency communications to the CPU, wherein the CPU is mounted on a backplane of a rack, wherein the means for wireless radio frequency communications and the CPU communicate without using the PLC module bus. Rather, AAPA describes a CPU and a wireless communication module that communicate across a PLC module bus, and Holmes describes a connection device including a Bluetooth module that is coupled to the wireless

phone by a cable, wherein the Bluetooth module communicates wireless signals to a single separate Bluetooth device located within the vehicle, not to the wireless phone.

Accordingly, for at least the reasons set forth above, Claim 7 is submitted to be patentable over AAPA in view of Holmes.

Claim 8 depends from independent Claim 7. When the recitations of Claim 8 are considered in combination with the recitations of Claim 7, Applicants submit that dependent Claim 8 likewise is patentable over AAPA in view of Holmes.

Claim 9 recites a Programmable Logic Controller (PLC) including “a backplane comprising at least one module connector and a module bus; a central processing unit (CPU) card mounted on said backplane; and a transmitter/receiver mounted on said CPU card, said transmitter/receiver operationally coupled to said CPU to communicate therebetween without using said module bus, wherein said CPU is mounted on said backplane via said CPU card, said PLC configured to communicate with a plurality of remote wireless devices.”

Neither AAPA nor Holmes, considered alone or in combination, describes or suggests a Programmable Logic Controller, as recited in Claim 9. More specifically, neither AAPA nor Holmes, considered alone or in combination, describes or suggests a transmitter/receiver mounted on a CPU card, the transmitter/receiver operationally coupled to a CPU to communicate therebetween without using a module bus. Moreover, neither AAPA nor Holmes, considered alone or in combination, describes or suggests a PLC configured to communicate with a plurality of remote wireless devices. Rather, AAPA describes a CPU and a wireless communication module that communicate across a PLC module bus, and Holmes describes a connection device including a Bluetooth module that is coupled to the wireless phone by a cable, wherein the Bluetooth module communicates wireless signals to a single separate Bluetooth device located within the vehicle, not to the wireless phone.

Accordingly, for at least the reasons set forth above, Claim 9 is submitted to be patentable over AAPA in view of Holmes.

Claims 10-14 and 21 depend from independent Claim 9. When the recitations of Claims 10-14 and 21 are considered in combination with the recitations of Claim 9, Applicants submit that dependent Claims 10-14 and 21 likewise are patentable over AAPA in view of Holmes.

Claim 15 recites an apparatus that includes “a processor; a radio frequency receiver operationally coupled to said processor; a radio frequency transmitter operationally coupled to said processor, said transmitter is configured to send a wireless message to a programmable logic controller (PLC) having a central processing unit (CPU) and a PLC module bus for coupling at least one PLC module to the CPU; and means for wireless radio frequency communications operationally coupled to the CPU, wherein the CPU is mounted on a backplane of a rack, wherein the means and the CPU communicate without using the PLC module bus, said PLC configured to communicate with said processor and a plurality of remote wireless devices.”

Neither AAPA nor Holmes, considered alone or in combination, describes or suggests an apparatus, as recited in Claim 15. More specifically, neither AAPA nor Holmes, considered alone or in combination, describes or suggests a means for wireless radio frequency communications operationally coupled to a CPU, wherein the means and the CPU communicate without using the PLC module bus, and wherein the PLC is configured to communicate with a processor and a plurality of remote wireless devices. Rather, AAPA describes a CPU and a wireless communication module that communicate across a PLC module bus, and Holmes describes a connection device including a Bluetooth module that is coupled to the wireless phone by a cable, wherein the Bluetooth module communicates wireless signals to a single separate Bluetooth device located within the vehicle, not to the wireless phone.

Accordingly, for at least the reasons set forth above, Claim 15 is submitted to be patentable over AAPA in view of Holmes.

Claims 16-20 depend from independent Claim 15. When the recitations of Claims 16-20 are considered in combination with the recitations of Claim 15, Applicants submit that dependent Claims 16-20 likewise are patentable over AAPA in view of Holmes.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 1-21 be withdrawn.

In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully submitted,



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